

### Abstract of the Disclosure

The invention is directed to a method and an arrangement for operating an internal combustion engine assembly (1) which make possible a monitoring and, if required, correction of a quantity of an air system of the engine assembly (1). A physical quantity of the air system is computed from several input quantities with the aid of a physical model (5) of the air system of the internal combustion engine assembly (1). The at least one physical quantity is not an input quantity of the physical model (5). The at least one physical quantity, which is computed by means of the physical model (5), is compared to a measured value for the at least one physical quantity. One of the input quantities or a model internal quantity of the physical model (5) is monitored in dependence upon a deviation between the computed value and the measured value for the at least one physical quantity.